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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,174	12/02/2003	John B. Amundson	H0005443-9950 (1161.11391	4140

128 7590 11/28/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245	GARLAND, STEVEN R	
	ART UNIT	PAPER NUMBER
	2125	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/726,174	AMUNDSON ET AL.
	Examiner	Art Unit	
	Steven R. Garland	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>6/28/05, 9/14/05, 9/28/05</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-67</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-64, 66 and 67</u> is/are rejected.

7)☒ Claim(s) <u>65</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>6/28/05, 9/28/05</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-67 are pending.

2.   The rejection of claims 12 and 39 under 35 U.S.C. 112 1st paragraph is

withdrawn in view of applicant's amendment to these claims.

3.   The rejection of claims 22 and 54-59 under 35 U.S.C. 112 2nd paragraph is

withdrawn in view of applicant's amendment to these claims.

4.   The object to claims 33-52 is withdrawn in view of applicant's amendment to

parent claim 33.

5.   The rejection of claims 53,54, and 57 under 35 U.S.C. 102 in view of Nielsen et

al. is withdrawn in view of the amendment of parent claim 53.

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9.   Claims 1-3,5-14,16-26,29-40,42,43,45-47,50-54,57, 59-61, and 63 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoog et al. 2004/0193324.

Hoog et al. 2004/0193324 discloses an audible/visual interface for a thermostat (abstract); that the thermostat can be used to control heating, cooling; ventilation (0054); that modified parameters are announced and/or visually displayed (0022,0075); activating a final triggering means to complete programming (0023); use of buttons (28,30); use of different periods "wake", "day", "eve", and "sleep" periods (0038); use of an alphanumeric LCD (0039, fig.2); use of a report function which indicates that a parameter has been saved (0039-0041) ; informing the user of changes to the system and confirming completion of commands (0043,0064); use of a button 62 to save changes (0047); setting a clock (0053); setting different programs for heating/cooling (0059); use of a keypad 52; setting on/off functions (fig.3); display of multiple

parameters (fig. 2). See the abstract; figures; paragraphs 0005-0012; 0020-0023; 0035-
0047;0053-0057;0059;0064-0071; 0075-0076; and the claims. Note in particular
paragraph 0075. Note is also taken that in regards to claims 30-32 that simultaneous
display is not required only that a combination of messages be displayed and which can
occur a differing times.

In response to applicant's arguments; neither claim 1 or 33 actually requires
that an user indicate that the parameter modification is complete, but "only allowing a
user to indicate that parameter modification is complete" as in claim 1. The claims thus
only require that the user be allowed (not prevented or restrained) from indicating
parameter modification is complete. Further the type of indication of the end of
modification, as in claims 1 and 33, is not even specified and as such the indication can
be nothing more than stopping input of modified parameters or simply telling an on-
looker that modifications are complete, since the interface is not even required to be
used for this indication.

In addition claims 1,33, etc. do not specifically require that the steps be
performed in a certain order, as applicant appears to argue, but only that the steps be
performed.

Further in regards to claim 53 the completion means , such as 62 of Hoog , is
clearly different from the setting and receiving means (see paragraphs 0047,0048).
Further in regards to claim 60 and its dependent claims, note is taken that the
confirmation message can be displayed before the parameters are saved or after the
parameters are saved.

10.   Claims 62,64,66 and 67 are rejected under 35 U.S.C. 103(a) as being

unpatentable over by Hoog et al. 2004/0193324.

Hoog et al. 2004/0193324 discloses an audible/visual interface for a thermostat

(abstract); that the thermostat can be used to control heating, cooling; ventilation

(0054); that modified parameters are announced and/or visually displayed (0022,0075);

activating a final triggering means to complete programming (0023); use of buttons

(28,30); use of different periods "wake", "day", "eve", and "sleep" periods (0038); use of

an alphanumeric LCD (0039, fig.2); use of a report function which indicates that a

parameter has been saved (0039-0041) ; informing the user of changes to the system

and confirming completion of commands (0043,0064); use of a button 62 to save

changes (0047); setting a clock (0053); setting different programs for heating/cooling

(0059); use of a keypad 52; setting on/off functions (fig.3); display of multiple

parameters (fig. 2). See the abstract; figures; paragraphs 0005-0012; 0020-0023; 0035-

0047;0053-0057;0059;0064-0071; 0075-0076; and the claims. Note in particular

paragraph 0075. Note is also taken that in regards to claims 30-32 that simultaneous

display is not required only that a combination of messages be displayed and which can

occur a differing times.

Hoog however does not specifically state a message "saving changes " is

displayed, specify the exact length of the display, or that at least one parameter is not

displayed at the time of the confirmation message.

It would have been obvious to one of ordinary skill in the art to display a

confirmation message long enough to read such as one or more seconds.

Further it would have been obvious to one of ordinary skill in the art to chose

what ever words to display such as "saving changes " to indicate the current machine

state the operator.

11.   Claims 1-3,5,6,8-14,16-19,24,26-28,30-40,42,47-49,51-55,57, 58,60,61and 63

 are rejected under 35 U.S.C. 102(b) as being anticipated by Cottrell 2002/0005435

(cited by applicant).

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of

buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs

(0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other

parameters (0041-0042); confirming the set parameters after being set and visual

verification using various visual displays (0027 and the figures, note figure6a-6d);

control of heating (20) and cooling (21) on a schedule having various start/stop times

(fig.8). See the abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-

0082,0095, and the claims.

In response to applicant's arguments; neither claim 1 or 33 actually requires

that an user indicate that the parameter modification is complete, but "only allowing a

user to indicate that parameter modification is complete" as in claim 1. The claims thus

only require that the user be allowed (not prevented or restrained) from indicating

parameter modification is complete. Further the type of indication of the end of

modification, as in claims 1 and 33, is not even specified and as such the indication can

be nothing more than stopping input of modified parameters or simply telling an on-

looker that modifications are complete, since the interface is not even required to be used to for this indication.

In addition claims 1,33, etc. do not specifically require a specific order of steps to be performed in a certain order, as applicant appears to argue, but only that the steps be performed.

In response to applicant's arguments about claim 53, see the figures 6a-6d and their description and note the labels associated with the soft keys.

Further in regards to claim 1, for example, the alternatives of providing an indication to the user via the interface that the parameters will be saved or have been saved does not require this indication to be generated at the time of editing, but the limitation can be met at the time of editing or at a later time. Further in regards to claim 60 and its dependent claims, note is taken that the confirmation message can be displayed before the parameters are saved or after the parameters are saved. That simply stopping input of the parameter modification data is an indication that the parameter modification is complete and pushing the ok key (with its associated displayed message) provides a confirmation message at the time a parameter is displayed.

12.   Claims 7,15,41, 20-22, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottrell 2002/0005435.

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs (0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other

parameters (0041-0042); confirming the set parameters after being set and visual

verification using various visual displays (0027 and the figures); control of heating (20)

and cooling (21) means on a schedule having various start/stop times (fig.8). See the

abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-0082,0095, and the

claims.

Cottrell while teaching control of humidity and other parameters (0004) does not

specifically state that humidity and ventilation are controlled, that a fan is controlled, or

that equipment is turned on/off.

It would have been obvious to one of ordinary skill in the art to modify Cottrell to

control humidity and other parameters such as ventilation to force conditioned air to the

proper location and also turn the equipment on/off so that the heating, cooling,

ventilation and humidity control functions could be accomplished.

13.   Claims 4 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cottrell 2002/0005435 as applied to claims 1-3,5,6,8-14,16-19,24,26-28,30-40,42,47-

49,51-55,57,58,60,61 and 63 above, and further in view of Rosen 2003/0142121 (cited

by applicant).

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of

buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs

(0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other

parameters (0041-0042); confirming the set parameters after being set and visual

verification using various visual displays (0027 and the figures); control of heating (20)

and cooling (21) means on a schedule having various start/stop times (fig.8) . See the

abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-0082,0095, and the claims.

Cottrell however does not teach the use of a touch screen.

Rosen 2003/0142121 (cited by applicant) teaches a programmable thermostat with a touch screen, and display of an alphanumeric message (abstract). See the abstract; figures; paragraphs 0004-0007.

It would have been obvious to one of ordinary skill in the art to modify Cottrell in view of Rosen and use a touch screen. This would allow various additional functions to be added or deleted easily and allow one type of thermostat model to be easily adapted to different types of systems.

14.   Claims 1-3,5,6,8-14, 16-19,24,26,30-40,42,47,48,51,52,60,61 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Braeburn Model 5000 owners manual (cited by applicant).

The manual discloses a keypad (page 6), control of a fan, heating, and cooling (page 5), setting and use of various times, dates, and temperatures during a day (page 7, morn, day, eve, night), saving and display of parameters (pages 7-8, note steps 5-6 on page 8) and display of numeric and word data (see the figures) .

In response to applicant's arguments; neither claim 1 or 33 actually requires that an user indicate that the parameter modification is complete, but "only allowing a user to indicate that parameter modification is complete" as in claim 1. The claims thus only require that the user be allowed (not prevented or restrained) from indicating parameter modification is complete. Further the type of indication of the end of

modification, as in claims 1 and 33, is not even specified and as such the indication can

be nothing more than stopping input of modified parameters or simply telling an on-

looker that modifications are complete, since the interface is not even required to be

used to for this indication. Note also that the display of the Braeburn flashes indicating

the present editing position and that the previously edited parameters are no longer

flashing indicating that they are saved.

Applicant's arguments in regards to claim 53 and its dependent claims is

persuasive.

15.   Claims 1-6,8-14, 16-19, 24-28,33-40,42,47-49, 53-58,60,61, and 63 are rejected

under 35 U.S.C. 102(a) as being anticipated by Rite Temp 8082 cited by applicant as

(http://www.ritetemp.info/rtMenu 13.html, Rite temp 8082, (printed on 6/20/03).

The thermostat useable with a HVAC system has a touch screen and sounds

chirps (page 1); controls fan, heating, and cooling (page 1); allows selection and

displays time, temperature, day, provides icons (chirp note, home, etc.), uses

time slots (morn, day, etc.) on pages 2-3, allows review of stored programming

which clearly shows the stored parameters (page 4) and also provides an

indication that programming has been saved by returning to the home screen

indicating changes have been saved (60 sec rule); pushing the return home

icon after programming also provides an indication that programming is

complete; and additionally activating the locked program by touching the lock

button icon also provides an indication that programming is completed since no

program changes are allowed (pages 2,4,6) .

In response to applicant's arguments; neither claim 1 or 33 actually requires that an user indicate that the parameter modification is complete. The claims only require that the user be allowed (not prevented or restrained) from indicating parameter modification is complete. Further the type of indication is not even specified and such the indication can be nothing more than stopping input of modified parameters or simply telling an on-looker that modifications are complete.

16.   Claim 65 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Steven R. Garland whose telephone number is 571-272-

3741. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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Steven R Garland
Examiner
Art Unit 2125
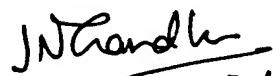
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